Ergonomic physical risk assessment in a assembly sector of truck manufacturing

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Auteur	Zare, Mohsen [1], Croq, Michel [2], Malinge-Oudenot, Agnès [3], Roquelaure, Yves [4]
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Résumé en anglais	Introduction: Work-related musculoskeletal disorders (WMSDs) represent an important occupational problem, with rising costs of lower quality of life, reduced productivity, wage compensation, and medical expenses. The aim of this study is to assess the physical workloads among workers in each group within the assembly cluster, and to study the variability of the workloads as a function of : 12 working positions, In 3 Improvement Groups, Within and between the individuals. Methods: This study has been done in a truck assembly industry. Manufacturing Ergonomic Standard method for production has been used for identifying potential ergonomic risks. Firstly, we evaluated 12 job positions in the selected cluster. Then, we compared the physical ergonomic workloads between each group. Finally, we assessed the worst position for all the people who work in this position. This evaluation was done several times to determine the variability among individual tasks. We used traffic light model for prioritizing the identified risk. Results: our finding showed that there are two positions with the double red task. Additionally, 9 of 12 evaluated positions in this cluster were red for wrist posture while the back postures were nearly similar in all positions (yellow). Also, we observed that risk factors are variable between and within the operators in the same position. Conclusion: The comparison of ergonomic physical workloads between and within each group shows a large variability of the physical workload. The comparison of each person showed that there are different human work activity for doing similar job between operators.

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